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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,371	12/30/2005	Jonathan Halls	29610/CDT320	4787

4743 7590 08/03/2009

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EXAMINER	
HO, ANTHONY	

ART UNIT	PAPER NUMBER
2815	

MAIL DATE	DELIVERY MODE
08/03/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,371	HALLS ET AL.	
	Examiner	Art Unit	
	ANTHONY HO	2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *57-88* is/are pending in the application.

4a) Of the above claim(s) *74,76 and 78-86* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *57-73,75,77,87 and 88* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is in response to amendment to application no. 10/519,371 filed on May 12, 2009.

Claims 57-88 are presented for examination.

Claims 74, 76 and 78-86 stand withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 57-58, 60, 62-73, 75, 77 and 87-88 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamazaki et al (US PUB 2002/0079512).

In re claim 57, Yamazaki et al discloses a combined information display and information input device comprising a matrix of independently addressable light emitting devices and a plurality of light sensing devices, said light emitting devices comprising organic

light emitting diodes comprising organic light emitting material positioned between a low work function electrode formed from a low work function material layer (*in this case, aluminum*) and a high work function electrode formed from a high work function material layer (*in this case, ITO*) and said light sensing devices comprising organic photovoltaic devices comprising at least an organic electron donor and at least an organic electron acceptor positioned between a high work function electrode formed from a high work function material layer (*in this case, ITO*) and a low work function electrode formed from a low work function material layer (*in this case, aluminum*), wherein the light emitting devices and the light sensing devices are disposed on a common substrate (430) and share (in this case, it is being "shared" either electrically or capacitively) the same high work function electrode formed from the same high work function material layer and/or the same low work function electrode formed from the same low work function material layer (Figure 4; Figure 19; paragraph 0034 – paragraph 0048; paragraph 0228 – paragraph 0232; paragraph 0372 – paragraph 0388).

In re claims 58 and 60, Yamazaki et al discloses one of the organic electron donor or organic electron acceptor or both comprises a semiconductive organic polymer (paragraph 0034 – paragraph 0048; paragraph 0228 – paragraph 0232; paragraph 0372 – paragraph 0388).

In re claims 62-64, Yamazaki et al discloses or suggests that all of the organic photovoltaic devices are sensitive to light in a non-visible region of the electromagnetic

spectrum (paragraph 0034 – paragraph 0048; paragraph 0228 – paragraph 0232; paragraph 0372 – paragraph 0388).

In re claims 65-67, Yamazaki et al discloses or suggests that all of the photovoltaic devices are sensitive to light in the infrared region of the electromagnetic spectrum (paragraph 0034 – paragraph 0048; paragraph 0228 – paragraph 0232; paragraph 0372 – paragraph 0388).

In re claims 68-69, Yamazaki et al discloses or suggests that the organic light emitting devices comprise a group of light emitting devices emitting light of a color in the visible range, non-visible range, and the infrared region of the electromagnetic spectrum (paragraph 0034 – paragraph 0048; paragraph 0228 – paragraph 0232; paragraph 0372 – paragraph 0388).

In re claims 70-73, 75 and 77, Yamazaki et al discloses or suggests the device further comprises having column electrodes, row electrodes, a matrix of light sensing devices, a column driver and detector, and a row selector driver (Figure 1; Figure 4; paragraph 0034 – paragraph 0048; paragraph 0228 – paragraph 0232; paragraph 0372 – paragraph 0388).

In re claims 87-88, Yamazaki et al discloses a hole transporting material layer that is "shared" (in this case, it is being "shared" either electrically or capacitively) between the light emitting devices and the light sensing devices (i.e. paragraph 0037).

Claim Rejections - 35 USC § 103

Claims 59 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al (US PUB 2002/0079512) as applied to claim 57 above, and further in view of Petritsch et al (WO 99/49525).

In re claim 59, Petritsch et al discloses at least one of the organic electron donor or organic electron acceptor comprises fullerene (Figure 5; page 8, paragraph 1 – page 9, paragraph 4).

The advantage is to enhance solubility (page 8, paragraph 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combined information display and information input device as taught by Yamazaki et al with at least one of the organic electron donor or organic electron acceptor comprises fullerene as taught by Petritsch et al in order to enhance solubility.

In re claim 61, Petritsch et al discloses both organic electron donor and organic electron acceptor comprise a blend of semiconductive organic electron donor polymer and semiconductive organic electron acceptor polymer (Figure 5; page 8, paragraph 1 – page 9, paragraph 4).

The advantage is to enhance solubility (page 8, paragraph 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the combined information display and information input device as taught by Yamazaki et al with both organic electron donor and organic electron acceptor comprise a blend of semiconductive organic electron donor polymer and semiconductive organic electron acceptor polymer as taught by Petritsch et al in order to enhance solubility.

Response to Arguments

Applicant's arguments filed May 12, 2009 have been fully considered but they are not persuasive.

In response to applicant's assertion that the light emitting devices and the light sensing devices share the same high work function material layer and the low work function material layer, examiner asserts that Yamazaki discloses the light emitting devices and the light sensing devices share the same high work function material layer and the low work function material layer. Since applicant has not specifically claimed how the light emitting devices and the light sensing devices are "sharing" the same high work function material layer and the low work function material layer, the light emitting devices and the light sensing devices in Yamazaki is interpreted as being “shared” either electrically or capacitively with the same high work function material layer and the low work function material layer.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the high work function electrode is the same layer in both the light emitting devices and the light sensing devices and the low work function electrode is the same layer in both the light emitting devices and the light sensing devices) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY HO whose telephone number is (571)270-1432. The examiner can normally be reached on M-F: 9:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Parker can be reached on 571-272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. H./
Examiner, Art Unit 2815
/Kenneth A Parker/
Supervisory Patent Examiner, Art Unit 2815